



SEQUENCE LISTING

<110> Khan, Nisar A.  
Benner, Robert

<120> Gene regulator

<130> 2183-5223US

<140> 10/028,075  
<141> 2001-12-21

<150> EP 01203748.7  
<151> 2001-10-04

<160> 176

<170> PatentIn Ver. 2.1

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Pro Gly Cys Pro  
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<400> 19

Leu Gln Gly Ala  
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<210> 20

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Val Leu Pro Ala Leu Pro Gln Val Val Cys  
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Ala Leu Pro Ala Leu Pro  
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<210> 22

<211> 6

<212> PRT

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<400> 22

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<210> 23

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1 5

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<210> 27  
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<210> 29  
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<400> 29  
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<210> 30  
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1 5

<210> 31  
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Val Leu Pro Ala Leu Pro Ala  
1 5

<210> 32  
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<210> 33  
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<400> 33  
Gly Val Leu Pro Ala Leu Pro Gln  
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<400> 34  
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys  
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<210> 35  
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<400> 35  
Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro

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5

10

15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu  
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Ser Cys Gln Cys Ala Leu  
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<210> 36  
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<400> 36  
Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys  
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<210> 37  
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Glu Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly  
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Tyr Cys Pro Thr  
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<210> 38  
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<400> 38  
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Pro Ser

<210> 39  
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<400> 39  
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser  
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<400> 40  
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<400> 41  
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<210> 42  
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<220>  
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<400> 42  
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<400> 43  
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<210> 44  
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signalling molecule

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Cys

<210> 45  
<211> 35  
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<220>  
<223> Description of Artificial Sequence: peptide  
signalling molecule

<400> 45  
Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys Glu  
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Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr  
20 25 30

Cys Pro Thr  
35

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<223> Description of Artificial Sequence: peptide  
signalling molecule

<400> 46

Cys Ala Leu Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp  
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His Pro Leu Thr Cys  
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<210> 47

<211> 18

<212> PRT

<213> Artificial Sequence

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signalling molecule

<400> 47

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu  
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Thr Cys

<210> 48

<211> 37

<212> PRT

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signalling molecule

<400> 48

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro  
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Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr  
20 25 30

Pro Ile Leu Pro Gln  
35

<210> 49

<211> 10

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<400> 49  
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln  
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<210> 50  
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<400> 51  
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<210> 52  
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Leu Gln Ala Val  
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<210> 53

<211> 5  
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Leu Gln Gly Val Val Pro  
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<210> 55  
<211> 5  
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Leu Asp Ala Leu Pro  
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<210> 56  
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pdb/1QMH/1QMH A

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Leu Gln Thr Val  
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<210> 57

<211> 10

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<400> 57

Leu Val Leu Gln Thr Val Leu Pro Ala Leu  
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<210> 58

<211> 4

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Ile Gln Gly Leu  
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<210> 59

<211> 4

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<223> Description of Artificial Sequence: pdb/1LYP/1LYP

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Leu Pro Lys Leu  
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<210> 60

<211> 5

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Leu Leu Pro Lys Leu  
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pdb/1B90/1B90 A

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Pro Ala Arg Pro  
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<210> 63  
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Met Thr Arg Ile  
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pdb/1SMP/1SMP I

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Leu Gln Lys Leu Leu  
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<210> 67  
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<212> PRT  
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<220>  
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pdb/1SMP/1SMP I

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Leu Gln Lys Leu Leu Pro Glu Ala Pro  
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<210> 68  
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Pro Thr Leu Pro  
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<210> 69  
<211> 5  
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Leu Gln Pro Thr Leu  
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<210> 70  
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pdb/1BHX/1BHX F

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Leu Gln Val Val  
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<210> 71  
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pdb/1VCB/1VCB A

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Pro Glu Leu Pro  
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<210> 72  
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Pro Ala Ala Pro  
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Pro Ala Ala Pro Gln  
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Pro Ala Ala Pro Gln Val  
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<210> 75  
<211> 4  
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<400> 75  
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<210> 76  
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<210> 77  
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<223> Description of Artificial Sequence: pdb/1BFB/1BFB

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Pro Ala Leu Pro Glu  
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<210> 78  
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<223> Description of Artificial Sequence:  
pdb/1R2A/1R2A A

<400> 78  
Leu Thr Glu Leu Leu  
1 5

<210> 79  
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<223> Description of Artificial Sequence: C3G peptide

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<210> 80  
<211> 4  
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pdb/1RLQ/1RLQ R

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Leu Pro Pro Leu  
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<210> 81

<211> 4

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<223> Description of Artificial Sequence:  
pdb/1RLQ/1RLQ R; swissnew/P01229/LSHB HUMAN

<400> 81

Pro Pro Leu Pro  
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<210> 82

<211> 4

<212> PRT

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<400> 82

Leu Pro Gly Leu  
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<210> 83

<211> 4

<212> PRT

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<220>

<223> Description of Artificial Sequence:  
pdb/1GJS/1GJS A

<400> 83

Leu Ala Ala Leu  
1

<210> 84

<211> 5  
<212> PRT  
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<220>  
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pdb/1GJS/1GJS A

<400> 84  
Leu Ala Ala Leu Pro  
1 5

<210> 85  
<211> 4  
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pdb/1GBR/1GBR B

<400> 85  
Pro Lys Leu Pro  
1

<210> 86  
<211> 6  
<212> PRT  
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pdb/1A78/1A78 A

<400> 86  
Val Leu Pro Ser Ile Pro  
1 5

<210> 87  
<211> 6  
<212> PRT  
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<223> Description of Artificial Sequence:  
pdb/1FZV/1FZV A

<400> 87  
Met Leu Pro Ala Val Pro  
1 5

v<sub>b</sub> v<sub>p</sub>

<210> 88  
<211> 4  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: pdb/1JLI/1JLI

<400> 88  
Leu Pro Cys Leu  
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<210> 89  
<211> 4  
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<223> Description of Artificial Sequence: pdb/1JLI/1JLI

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Pro Cys Leu Pro  
1

<210> 90  
<211> 5  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence:  
pdb/1HSS/1HSS A

<400> 90  
Val Pro Ala Leu Pro  
1 5

<210> 91  
<211> 4  
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pdb/1PRX/1PRX A

<400> 91  
Pro Thr Ile Pro

1

<210> 92  
<211> 6  
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<220>  
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pdb/1PRX/1PRX A

<400> 92  
Val Leu Pro Thr Ile Pro  
1 5

<210> 93  
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Val Leu Pro Gly Phe Pro  
1 5

<210> 94  
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Pro Gly Phe Pro  
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<210> 95  
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pdb/1GER/1GER A

<400> 95

Leu Pro Ala Leu Pro  
1 5

<210> 96  
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<212> PRT  
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<400> 96  
Met Pro Ala Leu Pro  
1 5

<210> 97  
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<220>  
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<222> (2)  
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<400> 97  
Met Xaa Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 98  
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<212> PRT  
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<223> The >Xaa= at position 2 indicates an unknown amino acid

<400> 98  
Met Xaa Arg Val

1

<210> 99  
<211> 17  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: AI126906

<400> 99  
Ile Thr Arg Val Met Gln Gly Val Ile Pro Ala Leu Pro Gln Val Val  
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Cys

<210> 100  
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<400> 100  
Met Thr Arg Val Leu Gln Val Val Leu Leu Ala Leu Pro Gln Leu Val  
1 5 10 15

<210> 101  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.42246.3

<400> 101  
Lys Val Ile Gln Gly Ser Leu Asp Ser Leu Pro Gln Ala Val  
1 5 10

<210> 102  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.42246.3

<400> 102  
Leu Asp Ser Leu  
1

<210> 103  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.22430.1

<400> 103  
Val Leu Gln Ala Ile Leu Pro Ser Ala Pro Gln  
1 5 10

<210> 104  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.22430.1

<400> 104  
Leu Gln Ala Ile Leu  
1 5

<210> 105  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.22430.1

<400> 105  
Pro Ser Ala Pro  
1

<210> 106  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.63758.4

<400> 106

Lys Val Leu Gln Gly Arg Leu Pro Ala Val Ala Gln Ala Val  
1 5 10

<210> 107  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.63758.4

<400> 107  
Leu Pro Ala Val  
1

<210> 108  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.129320.2

<400> 108  
Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys  
1 5 10

<210> 109  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.129320.2

<400> 109  
Leu Pro Arg Leu  
1

<210> 110  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.129320.2

<400> 110  
Pro Met Leu Pro

1

<210> 111  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.22430.1

<400> 111  
Pro Ser Ala Pro Gln  
1 5

<210> 112  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: P20155

<400> 112  
Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val  
1 5 10

<210> 113  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Rn.2337.1

<400> 113  
Leu Val Gly Cys Pro Arg Asp Tyr Asp Pro Val  
1 5 10

<210> 114  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Rn.2337.1

<400> 114  
Leu Val Gly Cys  
1

<210> 115  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.297775.1

<400> 115  
Pro Gly Cys Pro Arg Gly  
1 5

<210> 116  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Mm.1359.1

<400> 116  
Leu Pro Gly Cys Pro  
1 5

<210> 117  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/056177/056177

<400> 117  
Val Leu Pro Ala Ala Pro  
1 5

<210> 118  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9W234/Q9W234

<400> 118  
Leu Ala Gly Thr Ile Pro Ala Thr Pro

1

5

<210> 119  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9W234/Q9W234

<400> 119  
Pro Ala Thr Pro  
1

<210> 120  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9IYZ3/Q9IYZ3

<400> 120  
Gly Leu Leu Pro Cys Leu Pro  
1 5

<210> 121  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9PVW5/Q9PVW5

<400> 121  
Pro Gly Ala Pro  
1

<210> 122  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9PVW5/Q9PVW5

<400> 122  
Leu Pro Gln Arg Pro Arg Gly Pro Asn Pro  
1 5 10

<210> 123  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptremb1/Q9PVW5/Q9PVW5

<400> 123  
Pro Arg Gly Pro  
1

<210> 124  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Hs.303116.2

<400> 124  
Gly Cys Pro Arg  
1

<210> 125  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1DU3/1DU3 A

<400> 125  
Gly Cys Pro Arg Gly Met  
1 5

210> 126  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1B1O/1B1O

<400> 126  
Leu Gln His Val  
1

<210> 127  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1FL7/1FL7 B

<400> 127  
Val Pro Gly Cys  
1

<210> 128  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
pdb/1HR6/1HR6 A

<400> 128  
Cys Pro Arg Gly  
1

<210> 129  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:pdb/1H6/1HR6 A

<400> 129  
Leu Lys Gly Cys  
1

<210> 130  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 130  
Pro Pro Gly Pro  
1

<210> 131  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 131  
Leu Pro Gly Cys Pro Arg Glu Val  
1 5

<210> 132  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 132  
Cys Pro Arg Glu  
1

<210> 133  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 133  
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 134  
<211> 4

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 134  
Met Met Arg Val  
1

<210> 135  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 135  
Val Leu Pro Pro Leu Pro  
1 5

<210> 136  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 136  
Val Leu Pro Pro Leu Pro Gln  
1 5

<210> 137  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 137  
Ala Val Leu Pro Pro Leu Pro  
1 5

<210> 138  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P01229/LSHB HUMAN

<400> 138  
Ala Val Leu Pro Pro Leu Pro Gln  
1 5

<210> 139  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 139  
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Val Pro Gln Val Val  
1 5 10 15

Cys

<210> 140  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 140  
Leu Gln Ala Gly  
1

<210> 141  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:

swissnew/P07434/CGHB PAPAN

<400> 141  
Val Leu Pro Pro Val Pro  
1 5

<210> 142  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 142  
Val Leu Pro Pro Val Pro Gln  
1 5

<210> 143  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 143  
Ala Val Leu Pro Pro Val Pro  
1 5

<210> 144  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/P07434/CGHB PAPAN

<400> 144  
Ala Val Leu Pro Pro Val Pro Gln  
1 5

<210> 145  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 145  
Met Thr Arg Asp  
1

<210> 146  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 146  
Gln Asp Val Cys  
1

<210> 147  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
swissnew/Q28376/TSHB HORSE

<400> 147  
Ile Pro Gly Cys  
1

<210> 148  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9Z284/Q9Z284

<400> 148  
Pro Ala Leu Pro Ser  
1 5

<210> 149

<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 149  
Leu Pro Gly Gly Pro Arg  
1 5

<210> 150  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 150  
Leu Pro Gly Gly  
1

<210> 151  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:  
sptrembl/Q9UCG8/Q9UCG8

<400> 151  
Gly Gly Pro Arg  
1

<210> 152  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: XP\_028754

<400> 152  
Leu Gln Arg Gly  
1

<210> 153

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: XP\_028754

<400> 153

Leu Gln Arg Gly Val

1

5

<210> 154

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: XP\_028754

<400> 154

Leu Gly Gln Leu

1

<210> 155

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SignalP (CBS)

<400> 155

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro

1

5

10

<210> 156

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule  
type I (A\_0201)

<400> 156

Val Leu Gln Gly Val Leu Pro Ala Leu

1

5

43 109

<210> 157  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule type I (A\_0201)

<400> 157  
Gly Val Leu Pro Ala Leu Pro Gln Val  
1 5

<210> 158  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule type I (A\_0201)

<400> 158  
Val Leu Pro Ala Leu Pro Gln Val Val  
1 5

<210> 159  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule type I (A\_0201)

<400> 159  
Arg Leu Pro Gly Cys Pro Arg Gly Val  
1 5

<210> 160  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA molecule type I (A\_0201)

<400> 160  
Thr Met Thr Arg Val Leu Gln Gly Val

1

5

<210> 161  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: MHC II (H2 Ak  
15 mers)

<400> 161  
Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu  
1 5 10 15

<210> 162  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: MHC II (H2 Ak  
15 mers)

<400> 162  
Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val  
1 5 10 15

<210> 163  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA DRB1\*0101  
15 mers

<400> 163  
Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser  
1 5 10 15

<210> 164  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA DRB1\*0101  
15 mers

<400> 164  
Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

<210> 165  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA DRB1\*0101  
15 mers

<400> 165  
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr  
1 5 10 15

<210> 166  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA DRB1\*0301  
(DR17) 15 mers

<400> 166  
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val  
1 5 10 15

<210> 167  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: HLA DRB1\*0301  
(DR17) 15 mers

<400> 167  
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val  
1 5 10 15

<210> 168  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF 56  
peptide

<400> 168  
Val Ala Pro Ala Leu Pro Gln  
1 5

<210> 169  
<211> 35  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF 62  
peptide

<400> 169  
Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro  
1 5 10 15  
Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu  
20 25 30  
Ser Cys Gly  
35

<210> 170  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF 67  
peptide

<400> 170  
Cys Pro Arg Gly Val Asn Pro  
1 5

<210> 171  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF 70  
peptide

<400> 171

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln  
1 5 10

<210> 172  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF 75  
peptide

<400> 172  
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly  
1 5 10 15

Pro Cys

<210> 173  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF-56  
peptide

<400> 173  
Val Ala Pro Ala Leu Pro Gln  
1 5

<210> 174  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPPF-71  
peptide

<400> 174  
Met Thr Arg Val Leu Pro Gly Val Leu Pro Ala Leu Pro Gln Val Val  
1 5 10 15

Cys

<210> 175

<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: NMPP peptide

<400> 175  
Cys Arg Gly Val Asn Pro Val Val Ser  
1 5

<210> 176  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: peptide

<400> 176

Arg Ala Leu Pro Pro Leu Pro Arg Tyr  
1 5